

VI. REMARKS

The abstract has been amended to conform the language to that given in the sample abstracts shown in MPEP 608.01(b) E. It is therefore submitted that the abstract is no longer objectionable.

Claims 1-3, 7-16 and 20-32 are not unpatentable under 35 U.S.C 103(a) over Ma with Kudhrethaya in view of Hughes.

Claim 1 is a method for performing operations for synchronizing a positioning receiver with a received code-modulated spread spectrum signal. A number of vectors (having, e.g., N samples each) are formed, and a correlation (multiplication in the FHT space) is performed on each sample vector. Then inverse FHT is performed for each multiplication result, and the frequency shift and code phase are determined on the basis of the results of the inverse FHTs. In particular, claim 1 recites taking samples (step 101 in Figure 2) from the received signal for forming at least two sample vectors. This is explained on page 10, line 3, et seq., and shown in Figure 2 as sample vectors P(1), P(2), P(3), etc. The advantages thereof are that the synchronization is faster than taking only one sample vector at a time, and if there is more than one high value, the greatest value can be determined by comparing the high values. These advantages and features are not disclosed or suggested by any reference.

Ma discloses a method for rapid acquisition of multiple GPS signals. The method uses FFT of input GPS signals to simultaneously track multiple satellites and derive pseudorange

measurements that are suitable for navigation. The method utilizes 2M samples of a combined reference signal with N samples of the signal from the satellites to directly compute the fractional pseudorange values for four or more satellites. The combined reference signal is a combination of reference codes of each satellite being tracked at a given time (column 3, lines 36-40). It is clear that Ma uses only one section of N samples in the correlation process. There is absolutely no disclosure of forming at least two sample vectors, as recited in claim 1.

Kudrethaya discloses spread spectrum systems. There is no disclosure of forming at least two sample vectors. It is also noted that Kudrethaya is for the problem of sensitivity (see column 4, lines 17-19) and not speed or determining the greatest value, and thus it cannot be properly combined with Ma to solve the problems solved by the present invention. Similarly, Hughes also fails to disclose the forming at least two sample vectors feature even though it shows that FFTs can be replaced FHTs. Also, Hughes is for data processing of seismic traces to reduce noise (see column 1, lines 10 and 11). Since it is both in a different art and solves a different problem, it is not properly combinable with Ma and Kudrethaya.

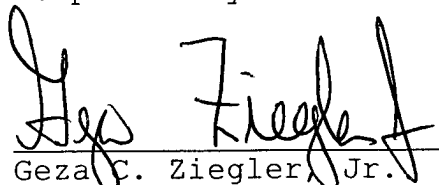
Thus the references are not properly combinable, and even if the references are somehow combined, the result is not the present invention since the claimed feature of forming at least two sample vectors is still missing. Similarly, independent claims 9, 14, 22 and 29 recite this feature. Hence claims 1-3, 7-16 and 20-32 are not unpatentable.

New claims 33 and 34 respectfully correspond to allowable claims 4 and 17 rewritten in independent form and are therefore allowable

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check in the amount of \$400.00 is enclosed for the added independent claims. The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


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21 MARCH 2006
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